### U.S. Department of the Interior • U.S. Geological Survey

## MINERAL INDUSTRY SURVEYS

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#### **ALUMINUM IN OCTOBER 1997**

Domestic primary aluminum production in October was 307,214 metric tons. The average daily production rate was 9,910 tons, an increase of 1% from that of the previous month and that of October 1996.

The monthly average U.S. market price of primary aluminum ingot decreased slightly from 76.98 cents per pound in September to 76.68 cents per pound in October, according to *Platt's Metals Week*. According to *American Metal Market*, the buying price range for processed aluminum used beverage can (UBC) scrap decreased slightly in early October to 58.5 to 59.5 cents per pound, and the price range remained at this level through the end of the month. According to *Resource Recycling's Container Recycling Report*, the monthly average transaction price for aluminum UBC's increased from 59.8 cents per pound in September to 61.4 cents per pound in October.

#### U.S. Trade

Total imports for consumption of aluminum for the first 9 months of 1997 increased 9% compared with those for the same period in 1996. Imports were higher in all three subcategories detailed in table 6. The largest percentage increase (12%) appeared in the plates, sheets, bars, etc. category; whereas, the largest tonnage increase (108,000 tons) was in the crude metal and alloys category.

Total U.S. exports of aluminum for the first 9 months of 1997 also increased and were approximately 3% above those for the same period in 1996.

#### **Update**

The monthly average market price of primary aluminum ingot increased to 78.08 cents per pound in November. The *American Metal Market* buying price range for aluminum UBC scrap held steady at 58.5 to 59.5 cents per pound through the end of November.

Reynolds Metals Co. announced that it would begin preparations to restart the carbon plant and a limited number of reduction cells at its Troutdale, OR, primary aluminum smelter. Aluminum production at an annual rate of approximately 25,000 tons was expected to begin in March 1998. The Troutdale smelter, which has an installed annual capacity of 121,000 tons, has been shut down since December 1991 (Reynolds Metals Co., 1997).

#### **References Cited**

Reynolds Metals Co., 1997, Reynolds Metals to restart 25,000 metric tons at Troutdale: Richmond, VA, Reynolds Metals Co. press release, November 17, 1 p.

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#### (Thousand metric tons)

		Second	lary recovery	y 2/	Imports for consumption				
D : 1	Primary				Metals and alloys,	Plates, sheets, bars,		Total new	Total stocks end of
Period	production	New	Old	Total	crude	etc.	Total	supply 3/	period 4/
1996: 5/	3,577	1,710	1,570	3,290	1,910	498	2,410	9,270	1,860 r/
1996:									
October	304	156	137	293	170	45	215	812	1,870 r/
November	295	143	130	273	147	41	188	756	1,850 r/
December	305	147	128	276	180	39	219	800	1,860 r/
JanOct.	2,977	1,480	1,290	2,770	1,580	418	2,000	7,740	1,870
1997:									
January	305	171 r/	149 r/	318 r/	145	42	188	811 r/	1,840
February		160 r/	139 r/	299 r/	147	37	184	760 r/	1,830
March	307	169 r/	150 r/	319 r/	209	48	257	883 r/	1,810
April		169 r/	151 r/	320 r/	196	48	244	859 r/	1,810
May	304	174 r/	147 r/	321 r/	198	49	247	872 r/	1,780 r/
June		164 r/	145 r/	309 r/	167	47	214	818 r/	1,790
July	305	176 r/	147 r/	324 r/	157	51	208	837 r/	1,810
August	304	174 r/	144 r/	318 r/	152	47	199	821 r/	1,800
September		173 r/	142 r/	315 r/	150	47	196	805	1,800
October	307	174	149	323	NA	NA	NA	NA	NA
JanOct.	2,996	1,710	1,460	3,170	NA	NA	NA	NA	NA

r/ Revised. NA Not available.

<sup>1/</sup> Data are rounded to three significant digits, except "Primary production"; may not add to totals shown.

<sup>2/</sup> Metallic recovery from purchased, tolled, or imported scrap, expanded for full coverage of industry.

<sup>3/</sup> Primary production, secondary recovery, and imports for consumption.

<sup>4/</sup> Includes scrap; data from Current Industrial Reports, Series M33D, U.S. Department of Commerce, Bureau of the Census.

<sup>5/</sup> Includes monthly and annual data.

# TABLE 2 ESTIMATED FULL COVERAGE CONSUMPTION OF AND METALLIC RECOVERY FROM PURCHASED NEW AND OLD ALUMINUM SCRAP 1/

#### (Thousand metric tons)

	~			grated	Indepe							
		ondary	alun	ninum	mi				O	ther		
	sm	elters	com	panies	fabricators		Foundries		consumers		Total	
	Con-		Con-		Con-		Con-		Con-		Con-	
	sump-	Metal	sump-	Metal	sump-	Metal	sump-	Metal	sump-	Metal	sump-	Metal
Period	tion	recovery	tion	recovery	tion	recovery	tion	recovery	tion	recovery	tion	recovery
1996: 2/	1,580	1,210	1,410	1,250	780	720	105	93	11	10	3,880	3,290
1996:												
October	125	102	125	111	77	71	9	9	1	1	337	293
November	125	101	113	101	68	63	9	8	(3/)	(3/)	315	273
December	124	100	113	100	72	67	9	8	1	1	318	276
JanOct.	1,240	1,010	1,180	1,050	675	622	90	82	6	6	3,190	2,770
1997:												
January	142	109	126	113	97 r/	90 r/	7	6	1	1	373 r/	318 r/
February	141	108	116	104	88 r/	81 r/	7	6	(3/)	(3/)	352 r/	299 r/
March	142	109	132	116	94 r/	87 r/	7	6	(3/)	(3/)	376 r/	319 r/
April	144	111	129	114	95 r/	88 r/	7	7	1	1	376 r/	320 r/
May	143	110	124	110	100 r/	93 r/	8	7	1	1	376 r/	321 r/
June	143	110	125	111	89 r/	82 r/	7	6	1	1	363 r/	309 r/
July		111	129	114	98 r/	91 r/	8	7	1	1	380 r/	324 r/
August	143	110 r/	119	105 r/	101 r/	94 r/	10	9	1	1	374 r/	318 r/
September		111	118	105	94 r/	87 r/	14	12	1	1	370 r/	315 r/
October	146	112	123	109	96	89	14	13	1	1	379	323
JanOct.	1,430	1,100	1,240	1,100	952	881	88	78	6	6	3,720	3,170

r/ Revised

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

<sup>2/</sup> Includes monthly and annual data.

<sup>3/</sup> Less than 1/2 unit.

# TABLE 3 CONSUMPTION OF AND RECOVERY FROM PURCHASED NEW AND OLD ALUMINUM SCRAP IN OCTOBER 1997 1/

#### (Metric tons)

			Calculated			
	Cons	umption	metallic	recovery		
	Tabulated	Tabulated Estimated		Estimated		
	reports	full coverage	reports	full coverage		
Secondary smelters	122,000	146,000	93,700	112,000		
Integrated aluminum companies	123,000	123,000	109,000	109,000		
Independent mill fabricators	80,100	96,100	73,900	88,600		
Foundries	11,700	14,000	10,400	12,500		
Other consumers	470	564	470	564		
Total	337,000	379,000	288,000	323,000		

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

TABLE 4  $\label{eq:purchased} \mbox{PURCHASED AND TOLL-TREATED ALUMINUM-BASE SCRAP AND SWEATED PIG IN OCTOBER 1997 \ 1/ }$ 

#### (Metric tons)

	Stocks,	Net	Melted or	Stocks,	
	opening	receipts 2/	consumed	closing	
New scrap:					
Solids	28,200 r/	91,600	91,400	28,400	
Can stock clippings	8,660 r/	25,400	25,700	8,310	
Other clippings	6,570 r/	15,900	15,400	7,070	
Borings and turnings	5,730 r/	21,300	21,400	5,640	
Dross and skimmings	3,010 r/	27,900	27,900	3,010	
Total new scrap	52,200 r/	182,000	182,000	52,400	
Old scrap:					
Used casting, sheet, and clippings	34,400 r/	59,900	59,500	34,700	
Aluminum-copper radiators	1,100 r/	2,540	2,160	1,480	
Used cans (shredded, loose, baled)	28,000 r/	87,300	87,400	27,900	
Fragmentized shredder (auto shredder)	W	W	W	W	
Other	1,170	5,150	5,150	1,170	
Total old scrap	64,600 r/	155,000	154,000	65,200	
Sweated pig	1,280	1,110	1,110	1,280	
Total all classes	118,000 r/	338,000	337,000	119,000	

r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

 $<sup>1/\,\</sup>text{Data}$  are rounded to three significant digits; may not add to totals shown.

<sup>2/</sup> Includes data on imported aluminum-base scrap.

#### TABLE 5 ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED STATES 1/2/

#### (Metric tons)

			Net			Net
	Stocks	Production	shipments	Stocks	Production	shipments
	opening	Oct.	Oct.	closing	JanOct. 3/	JanOct. 3/
Die cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	2,860 r/	6,300	6,490	2,680	61,300	62,700
380 and variations	12,400	40,100	40,100	12,400	400,000	399,000
Sand and permanent mold:	_					
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	13,100	1,920	1,920	13,100	19,200	19,200
No. 319 and variations	3,030 r/	10,900	10,900	3,050	108,000	108,000
F-132 alloy and variations	1,840	2,690	2,690	1,840	33,400	33,500
Al-Zn alloys	453	225	225	453	2,250	2,250
Al-Si alloys (0.6% to 2.0% Cu)	- 196	802	802	196	8,020	8,020
Al-Cu alloys (1.5% Si, max.)	- 60	77	77	60	771	771
Other 4/	3,940 r/	7,750	7,990	3,690	75,800	74,900
Wrought alloys:	=					
Extrusion billets	5,420 r/	13,600	13,700	5,330	131,000	132,000
Total all alloys	43,300 r/	84,300	84,800	42,800	840,000	841,000
Less:	_					
Primary aluminum consumed	XX	4,520	XX	XX	43,800	XX
Primary silicon consumed	XX	6,300	XX	XX	61,900	XX
Other alloying ingredients consumed	XX	429	XX	XX	4,240	XX
Net metallic recovery from aluminum scrap	_					
and sweated pig consumed in production of						
secondary aluminum ingot 5/	XX	73,100	XX	XX	730,000	XX

r/ Revised. XX Not applicable.

<sup>1/</sup> Excludes integrated aluminum companies.

<sup>2/</sup> Data are rounded to three significant digits; may not add to totals shown.

<sup>3/</sup> Includes revised data from previous months.

<sup>4/</sup> Includes alloys No. 12, Al-Mg, Al-Si-Cu-Ni, aluminum-base hardeners, variations of these alloys, plus other aluminum alloys. 5/ No allowance made for melt-loss of primary aluminum and alloying ingredients.

 ${\bf TABLE~6} \\ {\bf U.S.~IMPORTS~FOR~CONSUMPTION~OF~ALUMINUM~IN~SEPTEMBER~1997~1/}$ 

#### (Metric tons)

	Meta	ls and	Plates,	sheets,				
	alloys, crude		bars,	etc.	Scrap		Total	
Country	Sept.	JanSept.	Sept.	JanSept.	Sept.	JanSept.	Sept.	JanSept.
Argentina	1,460	10,000	140	733	157	3,020	1,750	13,800
Australia		1,250	186	668		1,340	186	3,260
Bahrain			703	6,930			703	6,930
Belgium	14	61	359	3,670	21	139	394	3,870
Bosnia and Herzegovina				17				17
Brazil	1,020	14,700	50	198		116	1,070	15,100
Canada	113,000	1,070,000	26,300	250,000	24,100	190,000	163,000	1,510,000
Croatia			55	309			55	309
Czech Republic			19	64			19	64
France	19	303	547	7,070	421	4,360	987	11,700
Germany	426	960	3,620	25,100	20	1,290	4,070	27,300
Ghana		1,160				1,650		2,810
Hungary		4	192	1,670			192	1,670
Italy		18	244	2,270		16	244	2,300
Japan	1	132	1,550	13,500	39	602	1,590	14,200
Korea, Republic of	16	61	2	284	96	1,750	114	2,100
Lithuania		17						17
Mexico	143	1,390	1,190	9,960	8,390	63,900	9,730	75,300
Netherlands		2,320	348	3,750	90	927	438	7,000
Norway	75	455	1	1,620			76	2,080
Russia	26,700	298,000	229	7,230	203	2,310	27,100	308,000
Slovakia	38	345					38	345
Slovenia			272	2,560			272	2,560
South Africa		11,400	442	3,710	73	710	515	15,800
Spain		47	2,050	10,200	142	553	2,200	10,800
Sweden		4,070	381	2,470	219	775	601	7,320
Switzerland	(2/)	(2/)	216	2,160			216	2,160
Tajikistan		4,030						4,030
Ukraine		2,560		19	42	148	42	2,730
United Arab Emirates					465	1,660	465	1,660
United Kingdom	548	7,670	1,650	13,600	1,480	7,570	3,690	28,800
Venezuela	6,180	83,500	2,710	22,600	1,110	11,800	10,000	118,000
Other		7,060	3,100	23,700	6,030	42,900	9,120	73,700
Total	150,000	1,520,000	46,600	416,000	43,100	338,000	239,000	2,270,000

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

<sup>2/</sup> Less than 1/2 unit.

### ${\bf TABLE~7} \\ {\bf U.S.~EXPORTS~OF~ALUMINUM~IN~SEPTEMBER~1997~1/}$

#### (Metric tons)

	Metals	s and	Plates, s	sheets,				
	alloys, crude		bars,	bars, etc.		ap	Total	
Country or territory	Sept.	JanSept.	Sept.	JanSept.	Sept.	JanSept.	Sept.	JanSept.
Australia		290	70	2,040	2	10	72	2,340
Belgium		8	203	8,100		136	203	8,250
Brazil	3	50	6,200	48,400		13	6,200	48,500
Canada	13,800	110,000	31,300	309,000	7,930	65,000	53,000	484,000
China	21	823	3,550	34,100	3,780	28,800	7,340	63,700
Czech Republic			2	19			2	19
Dominican Republic	(2/)	1	183	1,790		54	183	1,800
Estonia		3		9				12
France	27	196	613	3,840	1	8	641	4,050
Georgia				3				3
Germany	37	424	590	7,360	54	189	681	7,970
Hong Kong	681	3,560	1,320	14,000	2,330	22,700	4,330	40,300
India		2	42	109		184	42	295
Israel	7	39	87	641		9	94	689
Italy	3	51	130	2,290		20	133	2,360
Japan	10,100	77,100	2,950	26,600	3,570	28,800	16,600	132,000
Korea, Republic of	1,250	11,600	2,200	21,600	2,130	23,200	5,570	56,400
Malaysia	13	103	554	4,580	166	1,640	734	6,320
Mexico	7,200	43,900	8,220	74,700	2,920	23,400	18,300	142,000
Netherlands	13	76	114	1,040	19	42	146	1,150
Russia		2	13	38		5	13	45
Saudi Arabia	17	21	1,440	17,000			1,460	17,000
Singapore	101	185	253	2,460	6	63	359	2,710
Spain		6	35	1,910		78	35	1,990
Sweden	17	28	4	121	2	2	22	150
Taiwan	455	7,510	1,540	9,480	6,380	47,600	8,370	64,600
Thailand	120	1,940	1,130	5,860	122	1,060	1,370	8,860
Ukraine				8				8
United Kingdom	87	987	1,180	11,500	18	4,720	1,290	17,200
Venezuela	2	95	929	5,770	18	230	948	6,090
Other	512	3,190	4,290	48,400	280	2,890	5,080	54,500
Total	34,400	262,000	69,200	663,000	29,700	251,000	133,000	1,180,000

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

<sup>2/</sup> Less than 1/2 unit.